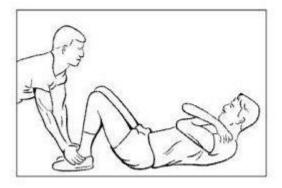
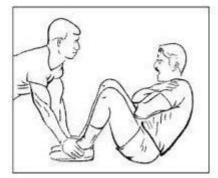
Muscular Strength/Endurance Assessment Part A is measured by completion of a curl-ups assessment. Schools can choose to complete the <u>60 second</u> curl ups test or curl-ups on a cadence.

## 60 Second Curl-Ups

The student lies on a cushioned, clean surface with knees flexed and feet approximately 12 inches from their buttocks. A partner assists by holding the feet down to the ground. The arms are held flat across the chest, with the hands placed on opposite shoulders. The subject raises the trunk, keeping the arms in position, curling up to touch their elbows to their mid-thighs and then lowers back to the floor so that the shoulder blades (upper back) touch the floor. The maximum number of sit ups performed in one minute is recorded.





Curl-Ups on a Cadence

Student will need to be grouped in pairs. One student will be Partner A, the other will be Partner B. Partner A will perform the curl-ups while partner B counts and watches for form errors.

Partner A lies on his/her back on the mat, knees bent at an angle of approximately 140°, feet flat on the floor, legs slightly apart, arms straight and parallel to the trunk with palms of hands resting on the mat. The fingers are stretched out and the head is in contact with the mat. Make sure students have extended their feet as far as possible from the buttocks while still allowing feet to remain flat on floor. The closer the feet are positioned in relation to the buttocks, the more difficult the movement.

After partner A has assumed the correct position on the mat, partner B places a measuring strip on the mat under partner A's legs so that partner A's fingertips are just resting on the nearest edge of the measuring strip \*(see below for measuring strip size specifications). Partner B then kneels down at partner A's head in a position to count curl-ups and watch for form breaks. Partner B places a piece of paper under partner A's head. The paper will assist Partner B in judging if partner A's head touches down on each repetition. Partner B should watch for the paper to crinkle each time Partner A touches it with his or her head.

Before beginning the curl-up, it is a good practice for Partner B to pull on partner A's hands to en-sure that the shoulders are relaxed and in a normal resting position. If partner A is allowed to hunch the shoulders before beginning the test, he or she may be able to get the fingertips to the other side of the testing strip by merely moving the arms and shoulders up and down. Keeping heels in contact with the mat, partner A curls up slowly, sliding fingers across the measuring strip until fingertips reach the other side. Partner A then curls back down until his or her head touches the piece of paper on the mat. Movement should be slow and gauged to the specified cadence of about 20 curl-ups per minute (1 curl every 3 seconds). The teacher should call a cadence or use a prerecorded cadence. Partner A continues without pausing until he or she can no longer continue or has completed 75 curl-ups. Students then switch roles.



\* For students under the age of 10, the measuring strip should be 3 inches in width. For students 10 and older, the measuring strip should be  $4\frac{1}{2}$  inches.